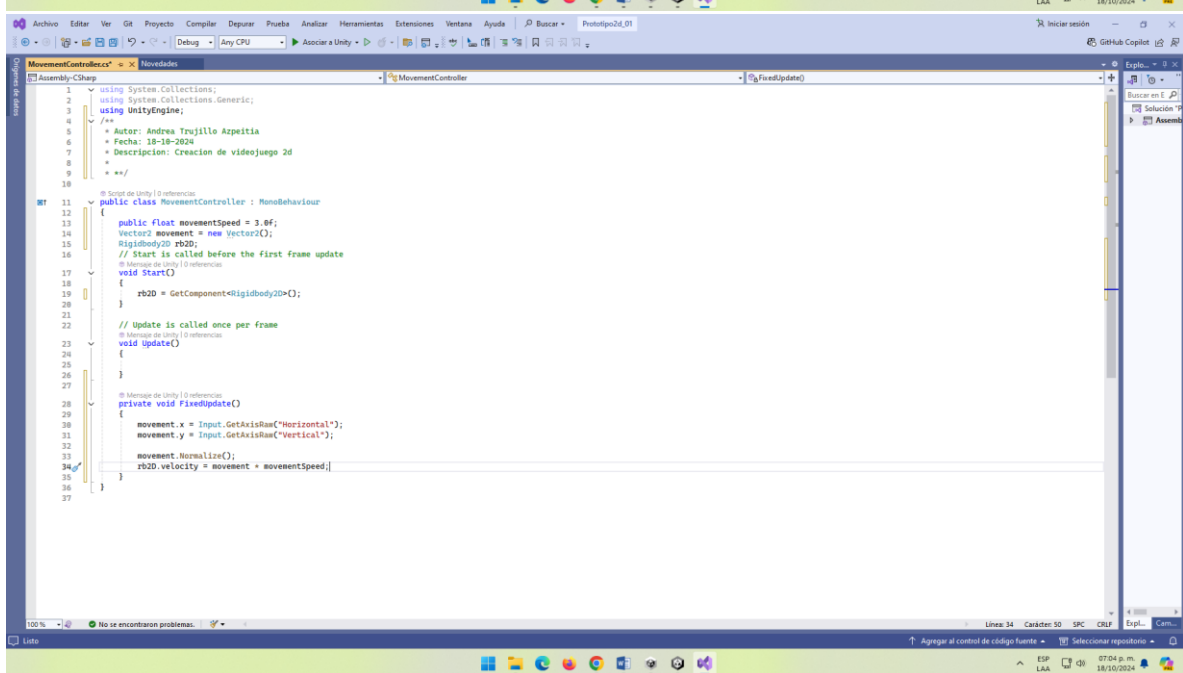


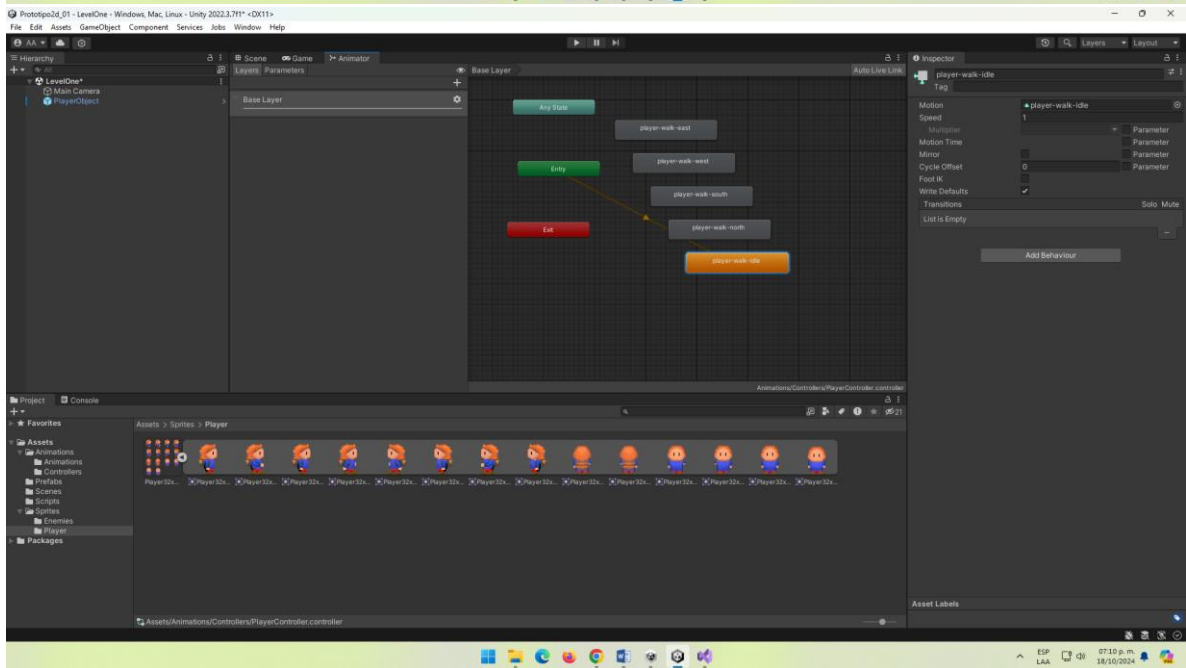
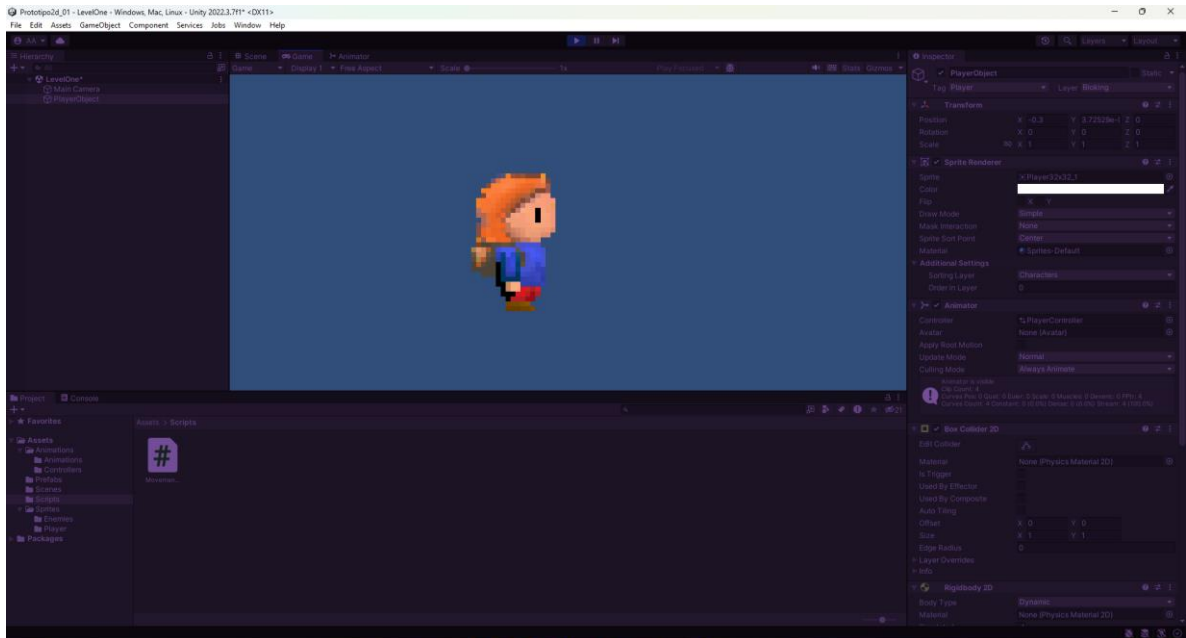
This screenshot shows the Visual Studio IDE with the 'MovementController' script open. The script is a C# MonoBehaviour class. It includes using statements for System.Collections, System.Collections.Generic, and UnityEngine. Metadata comments specify the author as Andrea Trujillo Arpeitia, the date as 18-10-2024, and the description as 'Creacion de videojuego 2d'. The class contains two methods: 'Start()' which initializes 'movementSpeed' to 3.0f, creates a 'Vector2 movement' object, and gets a 'Rigidbody2D' component named 'rb2D'; and 'Update()' which is called once per frame.

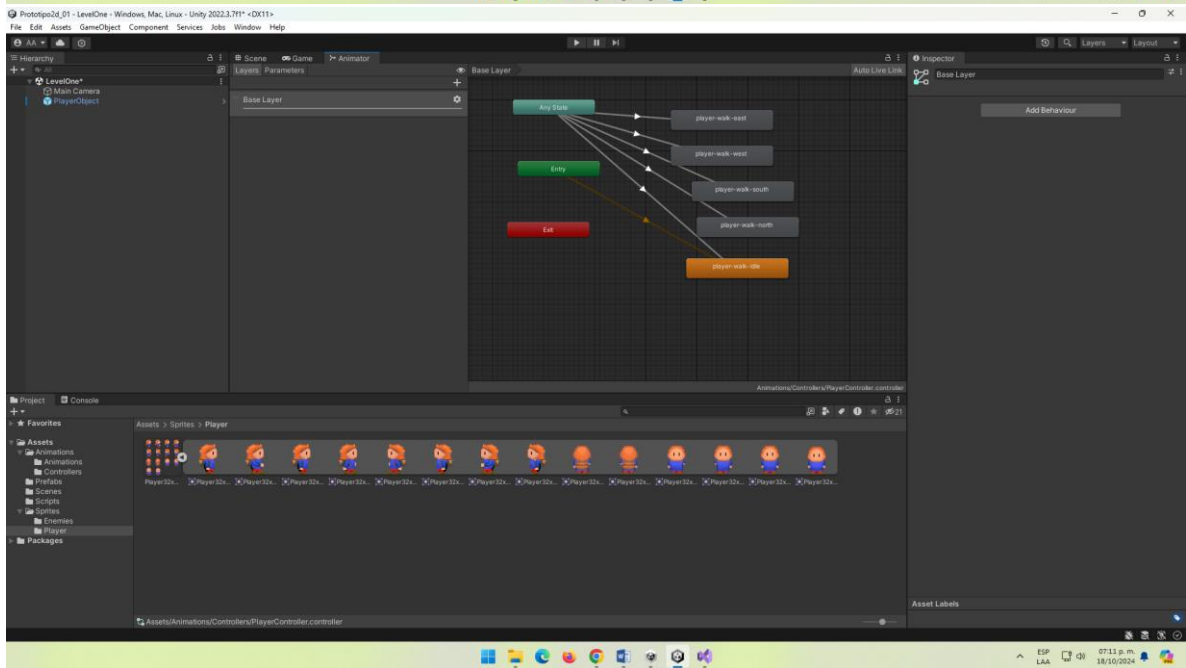
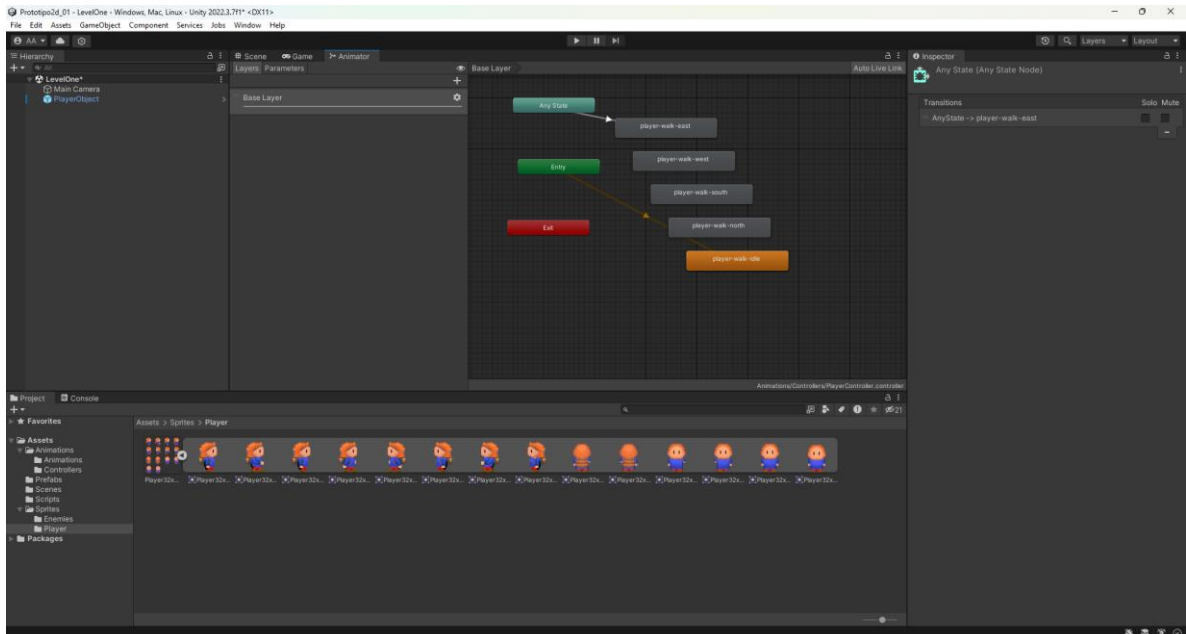
```
1 using System.Collections;
2 using System.Collections.Generic;
3 using UnityEngine;
4
5 //**
6 // Autor: Andrea Trujillo Arpeitia
7 // Fecha: 18-10-2024
8 // Descripción: Creacion de videojuego 2d
9 //**
10
11 // Script de Unity | 0 referencias
12 public class MovementController : MonoBehaviour
13 {
14     public float movementSpeed = 3.0f;
15     Vector2 movement = new Vector2();
16     Rigidbody2D rb2D;
17     // Start is called before the first frame update
18     void Start()
19     {
20         rb2D = GetComponent<Rigidbody2D>();
21     }
22
23     // Update is called once per frame
24     void Update()
25     {
26     }
27 }
28
```

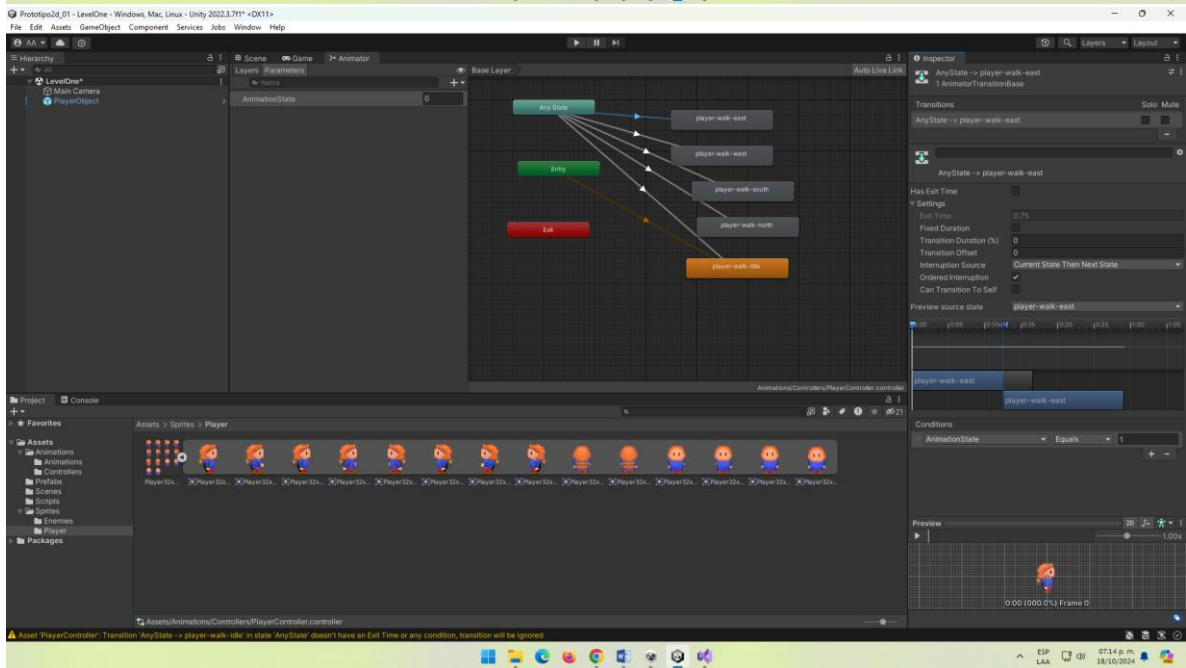
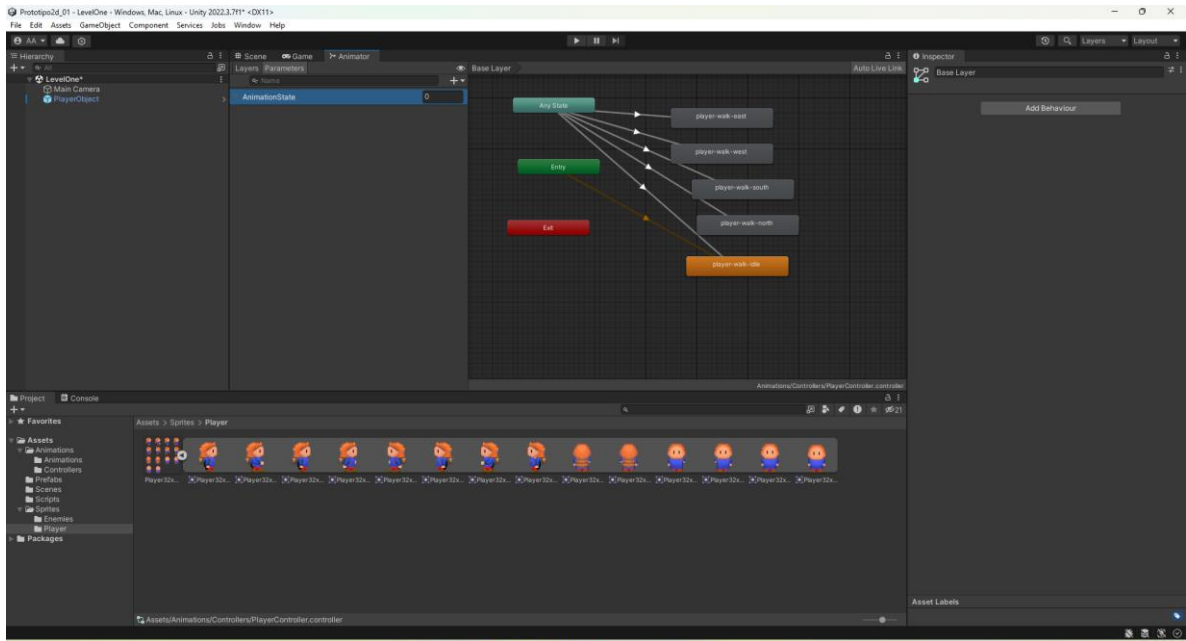


This screenshot shows the same Visual Studio IDE with the 'MovementController' script, now including a 'FixedUpdate()' method. This method handles input from the keyboard to move the object. It uses 'Input.GetAxisRaw' to get horizontal and vertical movement values, normalizes them, and then applies them to the 'rb2D.velocity' property, scaled by 'movementSpeed'.

```
1 using System.Collections;
2 using System.Collections.Generic;
3 using UnityEngine;
4
5 //**
6 // Autor: Andrea Trujillo Arpeitia
7 // Fecha: 18-10-2024
8 // Descripción: Creacion de videojuego 2d
9 //**
10
11 // Script de Unity | 0 referencias
12 public class MovementController : MonoBehaviour
13 {
14     public float movementSpeed = 3.0f;
15     Vector2 movement = new Vector2();
16     Rigidbody2D rb2D;
17     // Start is called before the first frame update
18     void Start()
19     {
20         rb2D = GetComponent<Rigidbody2D>();
21     }
22
23     // Update is called once per frame
24     void Update()
25     {
26     }
27
28     // Script de Unity | 0 referencias
29     private void FixedUpdate()
30     {
31         movement.x = Input.GetAxisRaw("Horizontal");
32         movement.y = Input.GetAxisRaw("Vertical");
33         movement.Normalize();
34         rb2D.velocity = movement * movementSpeed;
35     }
36 }
37
```





```
using UnityEngine;

// **
// Autor: Andrea Trujillo Aspettia
// Fecha: 18-10-2024
// Descripción: Creación de videojuego 2d
// **
// **

// Script de Unity 1.0 referencias
public class MovementController : MonoBehaviour
{
    public float movementSpeed = 3.0f;
    Vector2 movement = new Vector2();
    Rigidbody2D rb2D;

    Animator animator;
    string animationState = "AnimationState";

    // Referencias
    enum CharStates
    {
        walkEast = 1,
        walkSouth = 2,
        walkWest = 3,
        walkNorth = 4,
        idleSouth = 5
    }

    // Start is called before the first frame update
    // Mensaje de Unity 1.0 referencias
    void Start()
    {
        rb2D = GetComponent<Rigidbody2D>();
        animator = GetComponent<Animator>();
    }

    // Update is called once per frame
    // Mensaje de Unity 1.0 referencias
    void Update()
    {
    }

    // Mensaje de Unity 1.0 referencias
    private void FixedUpdate()
    {
        movement.x = Input.GetAxisRaw("Horizontal");
        movement.y = Input.GetAxisRaw("Vertical");
        movement.Normalize();
        rb2D.velocity = movement * movementSpeed;
    }
}
```

```
Vector2 movement = new Vector2();
Rigidbody2D rb2D;

Animator animator;
string animationState = "AnimationState";

// Referencias
enum CharStates
{
    walkEast = 1,
    walkSouth = 2,
    walkWest = 3,
    walkNorth = 4,
    idleSouth = 5
}

// Start is called before the first frame update
// Mensaje de Unity 1.0 referencias
void Start()
{
    rb2D = GetComponent<Rigidbody2D>();
    animator = GetComponent<Animator>();
}

// Update is called once per frame
// Mensaje de Unity 1.0 referencias
void Update()
{
    this.UpdateState();
}

// Referencias
private void UpdateState()
{
    if (movement.x > 0)
    {
        animator.SetInteger(animationState, (int)CharStates.walkEast);
    } else if (movement.x < 0)
    {
        animator.SetInteger(animationState, (int)CharStates.walkWest);
    } else if (movement.y > 0)
    {
        animator.SetInteger(animationState, (int)CharStates.walkNorth);
    } else if (movement.y < 0)
    {
        animator.SetInteger(animationState, (int)CharStates.walkSouth);
    }
    else
    {
        animator.SetInteger(animationState, (int)CharStates.idleSouth);
    }
}
```

```
39 }
40
41 private void UpdateState()
42 {
43     if (movement.x > 0)
44     {
45         animator.SetInteger(animationState, (int)CharStates.walkEast);
46     } else if (movement.x < 0)
47     {
48         animator.SetInteger(animationState, (int)CharStates.walkWest);
49     } else if (movement.y > 0)
50     {
51         animator.SetInteger(animationState, (int)CharStates.walkNorth);
52     } else if (movement.y < 0)
53     {
54         animator.SetInteger(animationState, (int)CharStates.walkSouth);
55     } else
56     {
57         animator.SetInteger(animationState, (int)CharStates.idleSouth);
58     }
59 }
60
61
62
63 // Mensaje de Unity | 0 referencias
64 private void FixedUpdate()
65 {
66     MoveCharacter();
67 }
68
69 // 1 referencia
70 private void MoveCharacter()
71 {
72     movement.x = Input.GetAxisRaw("Horizontal");
73     movement.y = Input.GetAxisRaw("Vertical");
74     movement.Normalize();
75     rigid.velocity = movement * movementSpeed;
76 }
77 }
```

